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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,085	04/21/2005	Petri Silenius	LAIN-089	8291

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EXAMINER	
CORDRAY, DENNIS R	

ART UNIT	PAPER NUMBER
1791	

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04/30/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/532,085	SILENIUS ET AL.	
	Examiner	Art Unit	
	DENNIS CORDRAY	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *2/20/08, 4/2/08*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9 and 11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9 and 11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's amendments and arguments filed 2/20/2008 have been fully considered but they fail to overcome the rejections over the cited prior art.

Applicant argues that limiting the method of Claim 1 to a method for manufacturing an envelope paper overcomes the anticipation rejections. Applicant also argues that envelope paper must exhibit particular properties, including light-weight, strength, printability and desired air-permeability. Applicant references the example data and associated drawing (Fig. 1) from the instant Specification to support the unexpected properties resulting from paper made using the claimed method.

Claim 1 pertains to a method, not to any specific product(s) made by that method. The method steps and ranges of filler addition are disclosed in the cited prior art, WO 02/92909 and US 2004/0173329, as used in the first rejection. The filler added to a papermaking pulp has an amount of inorganic salt compounds (light scattering material) in proportion to the fibrils from approx. 0.0001-95 wt-%, preferably approx. 0.1-90 wt-% and most suitably approx. 60-80 wt-%, based on the weight of the filler, and from approx. 0.1-80 wt-%, preferably approx. 0.5 -50 wt-%, based on the weight of the paper (p 3, lines 25-31). The preferred amounts disclosed significantly overlay the claimed ranges. WO 97/01679 discloses a similar process with an amount of calcium carbonate in the filler from 11.89-96.4 wt-% and an amount of filler used in the paper from 0.1-50 wt-%, thus also significantly overlaying the claimed ranges. Absent convincing evidence of unexpected results, it would have been obvious to one of

ordinary skill in the art to use a filler having the claimed composition as a preferred and functionally equivalent option.

Fig. 1 in the instant Specification only shows two data points for each filler composition, at about 10% PCC concentration and at about 20% PCC concentration based on the weight of the paper. The filler having 82% PCC by weight of the filler shows the lowest change in air permeance resistance, approximately 10% of the starting value when the amount of mineral component in the paper changes from about 10% to about 21%. If the data were to be extrapolated beyond about 21%, the change from the starting value appears to be greater than 10%. All of the other compositions used result in changes greater than 10% over the range of the data, which is less than the claimed range. Alternatively, if the change in air permeance resistance is viewed on an absolute scale, then all of the fillers used result in much less than a 10% absolute change. In any case, the data provided do not show how the air permeance resistance changes when the PCC amount in the paper increases from about 20% to 30%. In addition, there are no data to demonstrate unexpected properties only in the claimed range and no data for the other claimed light scattering particles. Finally, there is not a consistent change in the air permeance resistance with respect to the amount of PCC in the filler (e.g.-the data for 78% PCC shows greater change than those for 82% PCC. It also appears that the commercial PCC shows less change than the inventive fillers having 67 and 78% PCC, which would tend to obviate the claimed unexpected results. The provided data are inadequate to support scope of the claims.

WO 02/092909 teaches that paper made using the disclosed filler has excellent printing properties, good smoothness and high opacity and brightness (p 7, lines 24-26). Also, the grammage of the paper can be lowered without changing the other important properties, thus light weight paper is disclosed (p 2, lines 1-3). US 2004/0173329 teaches the same advantages. WO 97/01670 teaches the same advantages as well as better strength properties over earlier calcium carbonate fillers (p 2, lines 25-37). Thus the properties required for envelope paper are disclosed in the prior art with the exception of air permeability.

"[T]he discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer." Atlas Powder Co. v. Ireco Inc., 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. In re Best, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). The processes and fillers of the cited prior art are the same as the claimed process and fillers, thus the papers formed have substantially the same structure and the claimed air permeability or, at least, obtaining the claimed air permeability would have been obvious to one of ordinary skill in the art.

2. The double patenting rejections will remain on the record as presented until at least one of the current or copending applications has matured into a patent or until a proper Terminal Disclaimer has been filed.

The rejections over the cited prior art are maintained but have been modified to include the claim amendments.

Claim Rejections - 35 USC § 102 and USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-9 and 11 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Silenius et al (WO 02/92909).

Silenius et al discloses method of making a paper or base web comprising adding a filler to a papermaking pulp, thus a paper comprising a base web and a filler is produced (p 4, line 26 to p 5, line 2). The filler comprises calcium carbonate, calcium oxalate, calcium sulfate or barium sulfate aggregates (inorganic salt particles) precipitated on cellulose fibrils from an aqueous solution (p 2, lines 12-16; p 3, lines 24-27). The filler comprises cellulose fibrils produced by refining cellulose fibers (plant fibers) and screening into a preferred screened fraction of from P100 -P400, or from 100 to 400 Mesh. Fibrils passing through a 100 Mesh screen will pass through a 50-Mesh screen. The fibrils have a thickness from 0.1-2 μm and a length from 10-400 μm and (p 3, lines 13-23). The fibril dimensions significantly overlap the claimed dimensions.

Silenius et al discloses that the mass ratio of calcium carbonate to fibrils in the filler is from 0.0001-95% by weight. The amount of filler used is 0.1-80% by weight of the paper (p 3, lines 27-31). The composition significantly overlaps the claimed composition.

Silenius discloses that the paper can be coated with a layer having a weight of 5-30 gsm per side (p 5, lines 5-10; p 7, lines 20-22).

Silenius et al discloses that papers produced using the filler have better formation, retention, smoothness and a denser surface than when using commercial precipitated calcium carbonate. Other advantages disclosed include improved cost efficiency (p 2, lines 24-34).

While envelope paper is not explicitly disclosed by Silenius et al, it would have been obvious to one of ordinary skill in the art to make any kind of paper, including envelope paper, using the process to achieve the advantages disclosed by Silenius et al. Alternatively, any kind of paper can be made into an envelope.

The paper made by Silenius et al has a substantially identical structure to the paper made by the claimed process and will have the claimed air permeability because, where the claimed and prior art apparatus or product are identical or substantially identical in structure or composition, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). In other words, when the structure recited in the reference is substantially identical to that of the claims, the claimed properties or functions are presumed to be inherent.

"[T]he discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer." Atlas Powder Co. v. Ireco Inc., 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use,

new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. In re Best, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977).

Note that a rejection based on 35 U.S.C. 102(a) can be overcome by perfecting a claim to priority under 35 U.S.C. 119(a)-(d) by filing a certified priority document in the application and an English language translation, if the document is not in English and the examiner has established that the priority document satisfies the enablement and description requirements of 35 U.S.C. 112, first paragraph.

4. Claims 1-9 and 11 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Silenius et al (US 20040173329).

Silenius et al (US 20040173329) discloses identical subject matter to Silenius et al (WO 02/92909), detailed in the previous rejection, thus the detail will not be repeated. The subject matter is disclosed on p 1, pars 9 and 14-19; p 2, pars 23-25; and p 3, par 36.

Making envelope paper would have been obvious to one of ordinary skill in the art for reasons given above.

The paper made will have the claimed air permeability also for reasons previously given.

5. Claims 1-8 and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Silenius et al (WO 97/01670).

Silenius et al discloses method of making a paper comprising adding a filler to a papermaking pulp (pp 10-11, Example 2). The filler comprises calcium carbonate aggregates (inorganic salt particles) precipitated on cellulose fibrils from an aqueous solution (p 3, lines 13-19 and 31-33; p 6, lines 19-23). The filler comprises cellulose fibrils produced by refining cellulose fibers (plant fibers) and screening into a preferred screened fraction of from P100 -P400, or from 100 to 400 Mesh. Fibrils passing through a 100 Mesh screen will pass through a 50-Mesh screen. The fibrils have a thickness from 0.1-2 μm and a length from 10-400 μm and (p 3, lines 31-37 and p 6, lines 15-18). The fibril dimensions significantly overlap the claimed dimensions.

Silenius et al claims (Claim 6) that the mass ratio of calcium carbonate to fibrils in the filler is from 13.5-2700%, which corresponds to a ratio, expressed as a percentage, of calcium carbonate/(calcium carbonate + fibrils) of 11.89 to 96.4%. The amount of filler used is 0.1-50% by weight of the paper (p 7, lines 30-32). The composition significantly overlaps the claimed composition.

Silenius discloses that the paper can be coated (p 1, lines 7-9).

Silenius et al discloses that papers produced using the filler have better optical properties and better tensile strength than when using commercial precipitated calcium carbonate. Other advantages disclosed include better filler retention and reducing the grammage of the paper without sacrificing other qualities (p 13, line 10 to p 14, line 6).

Making envelope paper would have been obvious to one of ordinary skill in the art for reasons previously given.

The paper made will have the claimed air permeability for reasons previously given.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silenius et al in view of Silenius (EP-0930345 A2).

Silenius et al do not disclose that the filler can contain calcium oxalate, calcium sulphate, or barium sulphate.

Silenius (EP-0930345) discloses a filler containing fibrils produced by refining cellulosic fiber and a pigment that can be calcium carbonate, barium sulphate or any known pigment (Abstract, p3, lines 7-9).

The art of The art of Selenius et al, Silenius (EP-0930345) and the instant invention are analogous as pertaining to pigments used in filling paper. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use any of the claimed pigments in the filler for the paper of Selenius et al in view of Silenius (EP-0930345) as a well known and functionally equivalent option.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silenius et al in view of J. Peel (Paper Science & Paper Manufacture).

Silenius et al do not disclose the weight of the coating layer(s).

Peel teaches that typical coated papers known in the art have coating weights from 4-35 gsm per side.

The art of Silenius et al, Peel and the instant invention is analogous as pertaining to making coated papers. It would have been obvious at the time of the invention to one of ordinary skill in the art to apply to the paper a coating layer having the claimed weight per side in the process of Silenius et al in view of J. Peel as a typical range known in the art.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 12-18 of copending Application No. 10/475774. Although the conflicting claims are not identical, they are

not patentably distinct from each other because the claims of the instant application and those of the copending application are related as genus and species. The paper made by the method of the copending application will have the claimed air permeability for reasons given previously.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. Claims 1-8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 12 and 16 of copending Application No. 10/475773. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application and those of the copending application are related as genus and species. The paper made by the method of the copending application will have the claimed air permeability for reasons given previously.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. Claims 1-7 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 12-18 of copending Application No. 10/532481. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application and those of the copending application are related as genus and species. The paper made

by the method of the copending application will have the claimed air permeability for reasons given previously.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. Claims 1-8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 16-22 and 24 of copending Application No. 11/808273. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application and those of the copending application are related as genus and species. The paper made by the method of the copending application will have the claimed air permeability for reasons given previously.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DENNIS CORDRAY whose telephone number is (571)272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven P. Griffin/
Supervisory Patent Examiner, Art Unit 1791

/Dennis Cordray/

Examiner, Art Unit 1791

Application Number	Application/Control No.	Applicant(s)/Patent under Reexamination	
	10/532,085	SILENIUS ET AL.	
	Examiner	Art Unit	
	DENNIS CORDRAY	1791	